REMARKS

Reconsideration is repectfully requested. Claims 1-93 are currently pending in this application, with claims 1, 28, 31, 55, 57, 76-79, 84, 86, 92 and 93 being independent claims. No claims are being amended or cancelled by this amendment.

In conventional manufacturing systems, a machine tool is used to machine a workpiece, and then the workpiece is removed from the machine and placed in a coordinate measurement machine (CMM) for gathering dimensional data from the workpiece. In one prior art system, as described in the specification of the present application, the workpiece may be left in the machine tool, and the machine tool can obtain measurement data from the workpiece. In this prior art system, a single command of a coordinate measurement program that is being executed on a computer is translated into a single command for the machine tool controller. After the single command has been executed by the machine tool controller, data is fed back to the computer. This process can be time-consuming. In contast, in some embodiments of the present invention as recited in claim 1, a machine tool program is generated that includes a set of instructions to control a machine tool to perform coordinate measurements.

Claims 1-93 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,671,571 to Matsumiya et al. The Examiner states that Matsumiya discloses generating, from a dimensional metrology program, a machine tool program including instructions to control a machine tool to perform coordinate measurements. The Examiner points to element 31 of Matsumiya as support for this rejection.

The rejection is respectfully traversed. Claim 1 recites, among other limitations, generating a machine tool program including instructions to control a machine tool to perform coordinate measurements. In contrast, the system of Matsumiya discloses only using a measuring machine (31) for obtaining coordinate measurements, as described in Col. 4, lines 57-61, "[w]hen the process machining for the workpiece 30 in the first chucking attitude has been completed, a measuring machine 31 executes coordinate measurement of the workpiece 30 according to the measurement program of a measurement control apparatus 32" (emphasis added). Accordingly, withdrawal of the rejection of independent claim 1 is respecfully requested. Each of claims 2-27 depends either

directly or indirectly from independent claim 1 and withdrawal of the rejections of these claims is also requested for at least the same reasons as independent claim 1.

Moreover, based on the teachings of Matsumiya, it would not have been obvious to one of skill in the art to generate, from a dimensional metrology program, a machine tool program including instructions to control a machine tool to perform coordinate measurements. Because Matsumiya does not teach or suggest using a machine tool to obtain coordinate measurements, no suggestion is present in Matsumiya to generate a machine tool program to control a machine tool to perform coordinate measurements, let alone to generate a machine tool program from a dimensional metrology program.

Dependent claim 2, which depends from claim 1, recites that the machine controller executes the machine tool program to produce coordinate measurement data. The machine tool controller of Matsumiya does not execute a machine tool program that produces coordinate measurement data, and there is no any suggestion to do so. The absence of such a teaching or suggestion is not surprising as Matsumiya teaches the conventional technique of using a measuring machine to perform coordinate measurements rather than a machine tool.

Similarly, claim 12, which also depends from claim 1, recites communicating the machine tool program to the machine tool controller. Any machine tool programs that are communicated to the machine tool controller in Matsumiya do not include instructions to control the machine tool to perform coordinate measurements, and there is no suggestion in Matsumiya to communciate such a machine tool program. Again, the lack of such a teaching or suggestion is not surprising because the machine tool of Matsumiya is used for machining, but not for performing coordinate measurements.

With the exception of claim 79, the remaining independent claims (28, 31, 55, 57, 76-78, 84, 86, 92 and 93) include various system, method and computer-readable medium claims, and each of these claims recites a limitation in which an act or an element either generates or leads to the generation of a machine tool program including instructions to control a machine tool to perform coordinate measurements. Accordingly, withdrawal of the rejections of these independent claims and the claims that depend therefrom is respectfully requested.

Independent claim 79 recites a method comprising generating, from a dimensional metrology program, a self-contained machine tool program that is executable on a machine tool controller to perform coordinate measurements without interaction with a program generator. The system described in Matsumiya does not teach or suggest a program that is executable on a machine tool controller to perform coordinate measurements. In Matsumiya, an NC apparatus (25) controls machine tool (26), while a measurement control apparatus (32) controls measuring machine (31). The machine tool in Matsumiya does not perform coordinate measurements, and thus any machine tool program described in Matsumiya is not executable on a machine tool controller to perform coordinate measurements. Accordingly, withdrawal of this rejection is repectfully requested. Each of claims 80-83 depends either directly or indirectly from independent claim 79, and withdrawal of these rejections is respectfully requested for at least the same reasons provided above for independent claim 79.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, any necessary extension of time is hereby requested. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

By _____

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